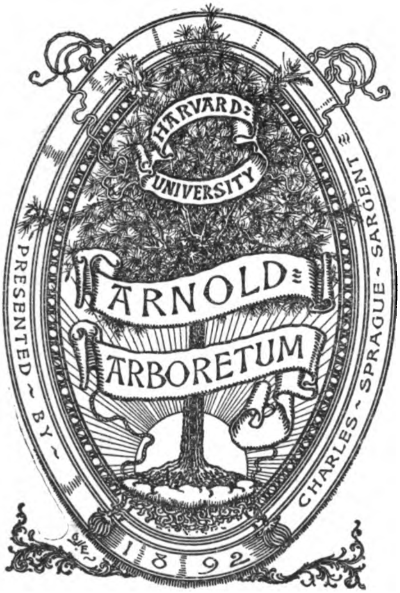

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1892

FLORÆ CAPENSIS MEDICÆ

PRODROMUS,

OR,

AN ENUMERATION OF SOUTH AFRICAN INDIGENOUS PLANTS,

USED AS

REMEDIES

BY THE

COLONISTS OF THE CAPE OF GOOD HOPE.

BY L. PAPPE, M.D.

Multum adhuc restat operis, multumque restabit.—Seneca.

CAPE TOWN:
A. S. ROBERTSON, 21, ADDERLEY-STREET.
1850.

TO

WILLIAM HENRY HARVEY, M.D. M.R.I.A.,

PROFESSOR OF BOTANY TO THE DUBLIN SOCIETY,

THE MERITORIOUS WRITER

ON THE

CAPE FLORA AND ON PHYCOLOGY,

THIS LITTLE WORK IS RESPECTFULLY INSCRIBED BY

THE AUTHOR.

PREFACE.

The study of Botany affords to medical men an opportunity, of becoming more intimately acquainted with the properties of such plants, as fall under their more mmediate observation. As similar tribes and families have a similar structure, and very often similar qualities, the Botanist, while judging from analogy, will be enabled to detect the hitherto unknown virtues of various plants. Although we owe much of our therapeutical knowledge to mere accident, yet we can, by the aid of that Science, set doubts at rest, discern certain plants from others of a similar habit, describe them properly, and assign them their place in the system.

The Colony of the Cape of Good Hope with its dependencies, occupying an immense tract of land, with but a scanty and sparse population, has long been reputed for its remarkable richness of vegetation.—The old proverb of *Semper aliquid novi ex Africa,* still holds good, and will retain its importance and truth, for centuries to come, notwithstanding the many discoveries, made during the last fifty years, in nearly all the branches of Natural History, by many zealous and intelligent travellers.

Little, as yet, is known with regard to those of our indigenous plants, which may be useful as Medicines. But it is more than likely, that, from the great variety of South African vegetation, the most valuable drugs will, at some time or other, be brought to light.*

* I presume that *Tarchonanthus camphoratus. Lin., Printzia aromatica. Less., Leontonyx angustifolius. D.C.,* &c. on account of their peculiar smell, and pungent aromatic taste, must posess medical properties, although I am ignorant of their ever having been employed for medical purposes; and I have reason to suppose, that the so called *Kattekruiden,* mentioned in *C. A. van der Merwe's* famous trial for the murder of his wife (1838,) are *Ballota africana Benth.,* a plant, which resembles the *European Horehound.* It is not narcotic at all, but has a bitter taste, and may well act, when applied externally, as a discutient.

At present, we are indebted for the greater part of our knowledge of Cape remedies to the colonial farmer, residing in the more remote parts of the interior, or to the wandering native. These people, deprived of all medical aid, feel the necessity of trying the efficacy of different plants within their reach. Several of these have been employed in various maladies, and some of them have found their way into the Pharmacopœia.

During a residence of nearly twenty years in the Cape Colony as a medical Practitioner, I have with pleasure devoted much of my time to the study of the Cape Flora. Observing, that many indigenous plants were sucessfully used by the Boers and coloured people as House-remedies, in various complaints, and finding, that the utility of most of them, was utterly unknown to the scientific world, I commenced collecting the materials, which gave rise to the present publication. This would have been far more complete and satisfactory, had I met with the co-operation of the country Practitioners, who have ample opportunities of becoming acquainted with the various remedies commonly used.

None of my readers can be more fully convinced of the deficiencies, contained in these pages, than myself; but I have had no other ambition for publishing them, except the common good, and no other claim, but that of originality. I have called this dissertation a *Prodrome* or Precursor of a more extensive work on the subject, which I intend commencing, when I shall meet with due encouragement.

Exclusive of the South African plants here enumerated and described, there are many others in daily use, which are *Aliens* to the Cape Flora, and are either cultivated in gardens, or have naturalized themselves. Some of these, it is true, are *very useful;* but I thought it proper to discard them from my list, as I consider it as a matter of course, that Naturalization should not qualify them to a full right of Burgership, which only belongs to those, that are aboriginal and indigenous.

Wishing, however, to render my Catalogue as complete as possible, I insert the names of such foreign medical plants, as have the confidence of the inhabitants of this Country.

Acorus calamus (*Kalmus*); Amygdalus communis

(*Amandels*); Centaurea benedicta (*Kardo-benedict*); Capsicum, several species (*Ricies* or *Cajenne-pepper*); Chenopodium ambrosioides; Datura Stramonium (*Stïnkblâren*); Ficus Carica (*Vygen*); Fumaria officinalis (*Duive-Kervel*); Iris Florentina (*Viol Wortel*); Malva rotundifolia (*Keesjes-blâren*); Morus nigra (*Moerbezies*); Melilotus parviflora (*Steenklaver*); Mentha aquatica and M. sylvestris (*Munt*); Origanum majorana (*Majoran*); Punica Granatum (*Granaat appel boom*); Plantago major (*Wegeblâren*); Populus alba (*Populier-boom*); Ruta graveolens (*Wynruit*); Solanum nigrum (*Nacht-schaduwen*); Sambucus nigra (*Vlier*); Salvia officinalis (*makke Salie*); Thymus hortensis (*Tijm*); &c.

I am not aware of any publication on South African Materia Medica, except that of a small dissertation by Thunberg, which appeared in the year 1785, under the following title: *Dissertatio de Medicina Africanorum*, and which has since been reprinted in the first volume of *Persoon's* Edition of *Thunberg's Dissertationes academicæ Upsaliae habitae. Goettingae* 1799. 8.

A rough sketch of the present work, merely containing names, and an account of the properties of some Cape Medical plants, was given in the third and fourth numbers of the Cape Town Medical Gazette for 1847, a journal, which, useful as it promised to be, soon ceased to exist from want of support. This list seems to have caused some interest at home, as a translation of it, with suitable notes, has been published by Dr. Martius of Erlangen. In arranging the whole, I have adopted the Natural System of De Candolle, and with regard to the generic characters, I refer the reader to Harvey's Genera of South African Plants.

Cape Town, 22d October, 1850.

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AN

ENUMERATION OF SOUTH AFRICAN MEDICAL PLANTS.

KNOWLTONIA. Salisb.

(RANUNCULACEÆ.)

1. *Knowltonia vesicatoria. Sims.* Herbaceous. *Leaves* triternate, leathery, smooth; segments oval or subcordate, sawed; lateral-ones obliquely truncate at base. *Flowers* umbellate, *umbel* nearly unbranched, few-flowered; *flowers* yellowish; *petals* linear.

Every part of this acrid plant is used as an Epispastic. The bruised herb, when applied to a painful part, raises a blister. It is therefore recommended in Rheumatism, Ischias, Lumbago, and similar affections, caused by sudden atmospheric changes. The root, when cut in slices, is a good substitute for Emplastrum Janini. The plant is found in almost every part of the Colony, and from its effects is well known by the name of *Brandblåren*.

RANUNCULUS. Lin.

(RANUNCULACEÆ.)

2. *Ranunculus pubescens Thbg. Root* fibrous. *Stem* herbaceous, erect, downy; all the *leaves* hairy; the radical-ones petiolate, ternate, their leaflets inciso-dentate. *Leaves* of the *stem* either trifid or subpinnatifid, toothed; the uppermost sessile. *Flowers* stalked, single, terminal, yellow. *Calyx* reflexed; *carpels* smooth, slightly mucronate, tuberculated.

This herb grows in ditches and marshes, &c., and is peculiar to the Cape and Uitenhage districts. The expressed juice, when fresh, is recommended in carcinomatous ulcers, and therefore has received the Dutch name of *Kankerblåren*.

CISSAMPELOS. Lin.

(MENISPERMACEÆ.)

3. *Cissampelos capensis. Lin. Stem* shrubby, twining. *Leaves* ovate, petiolate, blunt, entire, glabrous; *leaf-*

stalks short, downy. *Flower bunches* branchy, hardly longer than the leaf-stalks. *Flowers* diœcious, axillary, minute, whitish, tomentose.

This shrub is found in almost every mountainous part of the Colony. The roots are used as an emetic and purgative by the Boers, and go by the name of *Davidjes*, Its foliage is poisonous to cattle.

POLYGALA. Tourn.

(Polygaleæ)

4. *Polygala Serpentaria. Eckl. & Z.* *Root* thick, woody. *Stem* almost herbaceous, branchy, procumbent. *Leaves* alternate, obovate, smooth, entire, glaucous beneath, mucronate. *Flowers* on short pedicels, axillary, subcristate.

A shrub found in Caffraria. Though small, yet the root is comparatively thick and long, and is considered by the natives as a sure antidote against the bites of venomous snakes, whence its colonial name of *Kaffer Slangenwortel.* It belongs to the same section of the genus as the *Polygala Senega,* and may probably possess similar properties.

MUNDTIA. Kunth.

(POLYGALEÆ.)

5. *Mundtia spinosa. D. C.* Shrubby, erect, smooth, divaricating. *Branches* spiny at their apices. *Leaves* on short stalks, oblong, glabrous, veiny, blunt, mucronate. *Flowers* crested, sessile, axillary. *Fruit* a red, juicy berry.

A decoction of the tops of the branches of this shrub, which is very common in the downs, is used in Atrophy, Phthisis, etc., apparently with some effect, while the fruit, which is somewhat astringent in taste, is eaten by children and Hottentots, who call them *Skildpatbesjes.*

PAPPEA. Eck. & Zeyh.

(SAPINDACEÆ.)

6. *Pappea Capensis E. & Z.* A small tree. *Leaves* alternate, ovate, oblong, unequal at base, glabrous, blunt, coriaceous, veiny, slightly rolled back at the margin. *Flowers* small, racemose, with separate sexes by abortion. *Fruit* tricapsular, drupaceous, fleshy, globose, downy.

This tree is pretty common in Cafferland, and in the dis-

tricts of Uitenhage and Albany, where its fruit is known as *Wilde pruimen* (wild plums). It has some resemblance to the plum, is savoury, and furnishes a vinous beverage and excellent vinegar. Its kernel contains an oil, which, though eatable, is somewhat purgative, and is recommended as an external application in Tinea Capitis, Alopecia, or similar diseases, and may serve as a substitute for Macassar oil.

DODONÆA. Lin.

(SAPINDACEÆ.)

7. *Dodonæa Thunbergiana. E. & Z.* *Stem* shrubby, with angular branches. *Leaves* at the top of the twigs, sessile, alternate, narrow, lanceolate, attenuate at both ends, acute, entire, smooth. *Flowers* terminal, erect, stalked, small, greenish. *Fruit* a winged three-celled capsule.

A small tree or shrub, common about Piquetberg, Worcester and Clanwilliam, where it is called *Zand Olyf.* A decoction of the root is used as a slight purgative in fevers.

MONSONIA. Lin. Fil.

(GERANIACEÆ.)

8. *Monsonia ovata Cav.* *Root* annual, spindle-shaped. *Stem* herbaceous, simple, erect, shaggy. *Leaves* stalked, alternate, oblongo-ovate, subcordate at base, veiny, crenate, wavy, pubescent. *Stipules* and *bractlets* awl-shaped, rigid. *Peduncles* one-flowered, bracteate in the middle, villose. *Flowers* white, with purplish veins.

The *Keita* of the Hottentots. The root and herb of this plant are very astringent, and used with great success in Dysentery. It grows abundantly in the district of Uitenhage.

PELARGONIUM. L'Her.

(GERANIACEÆ.)

9. *Pelargonium* (Polyactium) *triste Ait.* *Root* tuberous. *Leaves* alternate, tripinnatifid, hispid; their *segments* bipinnatifid, and their *pinnules* wedge-shaped, incised. *Umbel* many-flowered. *Flowers* scented, yellow, with a dark purple spot at base.

The scarlet coloured root of this Pelargonium is somewhat astringent. If dried and pulverised, it is useful in Diarrhoea and certain forms of Dysentery, where purgatives have been previously given. It has also been recommended as a vermifuge, and is commonly found on the sides of Table Mountain.

10. *Pelargonium* (Jenkinsonia) *antidysentericum E. & Z.* *Stem* tuberous, fleshy. *Branches* lateral, erect, furrowed, angular. *Leaves* smooth, alternate, stalked, subcordate, lobed. *Lobes* incised. *Petioles* curved, longer than the leaves. *Stipules* prickly. *Flowers* purplish, and the nectariferous tube twice as long as the Calyx.

This plant, which is indigenous in Namaqualand, has tuberous roots, which often attain the size of a man's head, and are called *t'Namie* by the Aborigines, who boil them with milk, and make use of them in Dysentery.

11. *Pelargonium* (Peristera) *anceps. Ait.* Herbaceous, smooth. *Stems* decumbent, three-sided, two-edged. *Leaves* petiolate, roundish, cordate, lobed, toothed. *Stipules* oblong, two-parted. *Peduncles* axillary, elongated, umbellate. *Umbels* many-flowered. *Flowers* subcapitate, small, crimson.

This species, which grows plentifully along the water courses in the Cape and Swellendam districts, is a great favourite with the Malays, who call it *roode Rabassam,* and pretend that a decoction of the herb cures suppression of the Catamenia, and promotes parturition and *abortion.*

12. *Pelargonium cucullatum. Ait.* *Stem* shrubby, the whole plant viscid, hairy. *Leaves* alternate, kidney-shaped, hooded, waved, dentato-crenate. *Petioles* patent, channelled, longer than the leaves. *Flowers* terminal, umbellate, purple. *Umbels* many flowered.

This fine species, which is very common along the side of Table Mountain, has been recommended in the form of decoction, or as an Enema, in Colic, Nephritis and suppression of urine, and is also an excellent emollient. It appears, that formerly this herb has been exported to Holland, under the name of *Herba Altheæ. Cf. N. L. Burmanni* Specimen Botanicum de Geraniis. Lugd. Bat. 1759, 4to pag. 35.

MELIANTHUS. Lin.

(ZYGOPHYLLEÆ.)

13. *Melianthus major. Lin.* Shrubby *Leaves* alternate, smooth, unequally-pinnate, glaucous beneath; leaflets sharply toothed; *stipules* large, solitary, foliaceous, adnate with the leaf-stalk. *Flowers* racemose, reddish-brown; *peduncles* twisted, downy.

Every part of this plant has a nauseous smell, whence it

has received the Dutch name of *Truytje roer my niet.* A decoction of the leaves is an excellent external remedy in Tinea capitis, Crusta serpiginosa,* Necrosis and foul ulcers. It is also useful as a gargle and lotion in sore throat and in diseases of the gums, and the bruised leaves applied to ulcers, promote granulation. It is common in the Cape Flats and other parts of the Colony, and deserves a trial in cases of Plica Polonica.

DIOSMA. Lin.

(DIOSMEÆ.)

14. *Diosma* (Barosma) *crenata.* D. C. A glabrous branchy shrub. *Branches* round, purplish, the upper and smaller ones angular. *Leaves* stalked, smooth, oblongo-ovate, blunt, dotted beneath, and notched with transparent, resinous glands on their margin. *Flowers* peduncled, solitary, axillary; petals white, oblong, subsessile.

The ***Bucchu leaves*** have, as is well known, become an article of export lately. Their principal medical effects are owing to their possessing a considerable quantity of an aromatic volatile oil, and to a particular very tenacious principle, called ***Diosmin,*** as also to a semi-resinous substance. They have a peculiar smell, and a slightly astringent, bitter taste. When used in the form of infusion, they promote perspiration. Hence their utility in chronic Rheumatism, Gout, and other diseases, caused by the sudden suppression of cutaneous action. They have been prescribed also in Cholera Morbus, and are very beneficial in diseases of the bladder, especially in chronic inflammation of the mucous membrane of that organ (catarrh of the bladder), also in Hæmaturia, Calculus, and in suppuration of the vesica, urethra, and prostate gland. By increasing the secretion of urine, they impart to it their peculiar smell. They have also been given in dropsy;—in fine, in all those cachectic and hydropical complaints, arising from suppression of the perspiration or urine. As a stimulant to the stomach, some practitioners have used the Bucchu leaves in indigestion; a sensation of warmth has accordingly been produced in that organ, and the appetite increased.

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* A shoemaker, about 25 years of age, had laboured for some time under a most obstinate attack of *crusta serpiginosa.* All the usual remedies having failed, his medical attendant at last advised him, to try a decoction of this plant, to be applied in a tepid state. With this treatment and occasional aperients, and spare diet, he was perfectly cured within a month.

A Bath of the Bucchu leaves is of service in Rheumatism, and the *Bucchu Vinegar*, as also the *Bucchu Brandy*, are excellent embrocations in rheumatic pains, luxations, sugillations, sprains and contusions.

In trade, this valuable drug is often adulterated by the substitution of less powerful sorts of the same family of plants, which, although of a similar smell, are by no means equal to it, in their therapeutical effects. One of these plants is the *Diosma* (Barosma) *serratifolia. Lodd.*, a species common in the district of Swellendam, and another, the *Empleurum serrulatum. Sol.*, easily distinguished by its linear-lanceolate, serrated leaves.

The true *Diosma Crenata*, is a native of the mountains of Hottentot's Holland, Stellenbosch, Drakenstein, Tulbagh, and Worcester.

FAGARASTRUM. Don.

(XANTHOXYLEÆ.)

15. *Fagarastrum capense. Don.* A shrub, about 6 feet high. *Branches* compressed, flexuose, wrinkled, prickly. *Prickles* flat, sharp pointed. *Leaves* alternate, impari pinnate; *pinnæ* ovate, blunt, erect, sessile, smooth, slightly crenate. *Flowers* small, paniculated. *Capsule* dotted, *seeds* black, shining.

Found in the bush near Mossel Bay, and in the forests of the district of George, as also in those of Uitenhage and Albany. The fruit is known to the Colonists as the *wild Cardamom*, and, on account of its aromatic qualities, prescribed for flatulency and paralysis.

METHYSCOPHYLLUM. Eckl. & Zeyh.

(AMYRIDACEÆ.)

16. *Methyscophyllum glaucum E. & Z.* A resinous shrub. *Branches* erect, alternate. *Leaves* opposite, lanceolate, pointed at both ends, veiny, glabrous, glaucous, repando-dentate, bent back at the margin. *Flowers* paniculated. *Panicles* axillary, opposite, forked, few-flowered.

An infusion of the leaves of this shrub, is pleasant to the taste, and used in Cough, Asthma, and other diseases of the chest. It grows about the Zwarte Kei River, where it is a favorite beverage with the Bushmen and others, who also chew it, and call it *Boschjesmansthee.*

CYCLOPIA. Vent.

(LEGUMINOSÆ.)

17. *Cyclopia genistoides. Vent.* A glabrous shrub. *Stem* and *branches* erect, twiggy. *Leaves* alternate, sessile, trifoliate; *leaflets* linear, bluntly mucronate, revolute at the margin. *Flowers* axillary, bracteate, stalked, yellow. *Peduncles* one-flowered. *Bracts* 2 oblongo-ovate, pointed.

This plant is common in moist places on the Cape Flats, near Wynberg, Houtbay, and elsewhere. In the form of decoction or infusion, it is often made use of for the purpose of promoting expectoration in chronic Catarrh, and even in Consumption. It has a sweet, astringent taste, and is generally considered as a restorative. Its vernacular name is *Honigthee.*

BORBONIA. Lin.

(LEGUMINOSÆ.)

18. *Borbonia ruscifolia. Sims.* A small, glabrous shrub. *Branches* compressed, angular, winged. *Leaves* alternate, amplexicaul, cordate, many-nerved, mucronate, ciliato-dentate. *Calyx* and *corolla* nearly smooth; *flowers* yellow.

Common on the Lion's Head and on Table Mountain, and used, under the significant name of *Stekelthee,* apparently with good effect, in Asthma and Hydrothorax. It is commonly given as a Diuretic, in the form of decoction.

VASCOA. D. C.

(LEGUMINOSÆ.)

19. *Vascoa amplexicaulis D. C.* A glabrous undershrub. *Stem* erect, branchy. *Leaves* simple, amplexicaul, suborbicular, cordate at base, reticulated, quite entire, blunt; those of the stem alternate; the floral ones opposite, coloured. *Flowers* in the upper axils, glabrous, solitary, without bracts, shortly pedicellate yellow.

The roots of this pretty bush, taste like liquorice, whence its name of *Zoethout-boschje.* They are used in the form of decoction, as a demulcent in Catarrh and Phthisis, and are a good substitute for the liquorice itself. This useful plant inhabits the mountains of Worcester and Tulbagh.

20. *Vascoa perfoliata. D. C.* A small shrub. *Stem* glabrous, erect. *Leaves* amplexicaul, cordate, sub-orbicular, entire, bluntly mucronate, rigid, netted. *Flowers* yellow.

A strong decoction of the leaves of this species, acts as a powerful Diuretic, and is of great service in the various forms of dropsy. It grows on the Mountains of Hottentot's Holland.

SUTHERLANDIA. R. Br.

(LEGUMINOSÆ.)

21. *Sutherlandia frutescens R. Br.* Shrubby. *Stem* erect, twiggy. *Leaves* stalked, alternate, impari-pinnate, many-yoked; *pinnules* on short petioles, oblong, obtuse, emarginate, silky. *Flowers* racemose, peduncled, axillary, scarlet. *Legume* ovate, scarious, inflated.

A fine showy shrub, which, on account of its beautiful scarlet flowers, is a horticultural ornament, and cultivated as such in our gardens. It grows wild in hilly parts all over the Colony. According to *Thunberg* (Travels vol. I, pag. 160), the roots and leaves of this plant, when dried and pulverised, are of use in diseases of the eye.

ACACIA. Neck.

(LEGUMINOSÆ.)

22. *Acacia horrida. Willd.* A large tree. *Stem* and *branches* glabrous, but armed with large white spinous stipules. *Leaves* bipinnate; *pinnæ* 2-3 yoked; *pinnules* many-yoked, oblong, blunt. *Leafstalks* glandulous at base and on the apex. *Flowers* stalked, axillary, globose, polygamous, yellow, scented.

The demulcent derived from the *Doornboom*, is well known as an article of commerce. It exudes spontaneously from the bark of the trunk and branches, and hardens in the sun, without losing its transparency. Although the *Cape Gum* is inferior in appearance and in intrinsic value, to that of Northern Africa, it may yet be improved by care and attention. The *Acacia Giraffæ Willd.* (Kameel-doorn), growing beyond the limits of the Cape Colony, is said to yield a superior Gum.

CLIFFORTIA. Lin.

(ROSACEÆ.)

23. *Cliffortia ilicifolia. Lin.* Shrubby. *Stem* brown, scaly, branched. *Leaves* cordato-ovate, elliptical 3-5

toothed, spiny, many-nerved, amplexicaul, rigid, imbricated, smooth. *Flowers* diœcious, small, axillary, subsessile.

A plant pretty common in the district of Uitenhage, where the Boers recommend it as an emollient and expectorant in Coughs. This species, whose leaves are sharp-pointed and spiny, is called *Doornthee.*

EPILOBIUM. Lin.

(ONAGRARIÆ.)

24. *Epilobium villosum. Thbg. Stem* herbaceous, erect, round, branched, shaggy. *Leaves* sessile, alternate, lanceolate, sawed, acute, hairy. *Flowers* terminal, axillary, purple.

As a house-medicine, this herb, inhabiting the mountains of several districts, is renowned for its usefulness in cleansing foul ulcers.

BRYONIA. Lin.

(CUCURBITACEÆ.)

25. *Bryonia Africana. Lin.* Diœcious. *Root* tuberous. *Stem* climbing. *Leaves* smooth, rough on the margin; lower-ones cordate, angular, toothed; upper-ones palmato-partite, 5 lobed. *Lobes* oblong, inciso-dentate. Male *flowers* small, greenish, panicled, subumbellate. Fruit yellow, mucronate.

The porous root of this old Hottentot remedy (of which I have seen no specimens, and which probably belongs to *Coniandra*), is nauseous in taste. In the form of decoction, it acts simultaneously as an emetic, cathartic and diuretic. The natives call it *Davidjeswortel,* and use it in cutaneous affections, dropsy, and Syphilis. The tincture, or infusion of the root in wine or brandy, is, according to *Thunberg,* (Travels. 1. p. 128) a powerful emetic and purgative. This plant is said to grow in a sandy soil, near the beach in Hout-bay, and to flower in the month of April.

CITRULLUS. Schr.

(CUCURBITACEÆ.)

26. *Citrullus amarus. Schrad. Stem* angular, furrowed, hispid, decumbent. *Leaves* alternate, stalked; the upper-ones 3 parted; middle segment sinuate, pinnatifid; lateral-ones 2 fid; lobes blunt, scabrous,

pimpled; radical-leaves 5 parted. *Tendrils* axillary. *Flowers* diœcious. *Fruit* glabrous, ellipticо-globose.

This annual plant resembles a Water-melon in foliage. Its fruit, a round pepo of the size of a child's head, is filled with a spongy pulp. By the farmer, this fruit, which is bitter and loathsome, is called *Bitterappel* or *Wild Water-melon*, and is common in the sands of the Cape Downs near Tygerberg and Rietvalley, and in similar localities. The pulp of the pepo, like that of *Colocynth*, is a very strong, drastic purgative, and serves the same purpose, and is used as a cathartic in dropsy and other complaints. An extract can easily be prepared from it, equal in its effects to the extract of Colocynth.

PHARNACEUM. Lin.

(PARONYCHIACEÆ.)

27. *Pharnaceum lineare Thbg.* Suffruticose. *Root* fibrous, stemless. *Branches* radical, diffused, smooth, repeatedly forked. *Leaves* sessile, whorled, linear, unequal, entire, patent, blunt. *Stipules* scarious, torn. *Peduncles* axillary, elongated, terminal. *Flowers* paniculated or umbellate, white and purplish.

This little plant, which thrives best in a sandy soil, and abounds in the Cape Flats and Downs, is employed in pulmonary affections. It is generally used in the form of infusion, which is of a rather pleasant, aromatic, bitter taste, and is also somewhat mucilaginous and slightly diuretic. By the name of *Droedas Kruiden*, it is known to many Colonists, who make use of it in Coughs, and especially in those, that threaten consumption.

CRASSULA. Lin.

(CRASSULACEÆ.)

28. *Crassula tetragona. Lin.* *Stem* suffruticose, succulent, round, branchy, procumbent, smooth. *Branches* alternate, erect. *Leaves* connate, decussate, three-sided, incurved, acute, entire. *Flowers* terminal, corymbose, small, white.

A succulent plant, rather astringent, and a native of the district of Uitenhage. If boiled in milk, the leaves of this species are used as a tonic in Diarrhoea. The *Crassula portulacacea. Lam.*, which is called *T'Karkey* by the Hottentots, is said to be used in similar cases.

COTYLEDON. Lin.

(CRASSULACEÆ.)

29. *Cotyledon orbiculata Lin.* *Stem* fleshy, leafless, elongated, branchy. *Leaves* opposite, flat, obovate, spatulate, blunt, acuminate, (often) farinaceously glaucous, with a red border. *Flowers* paniculate, nodding.

This succulent shrub is common in mountainous parts. The leaves are thick, and from their shape called *Varkens-ooren*, (Pig's ears). The fresh juice is of service in Epilepsy, and has been prescribed by me in the case of a young man, subject to this frightful disease. Not only were the symptoms evidently diminished, but subsequent attacks were less violent. The leaves form an excellent application to hard corns. On removal of the epidermis of the upper side of the leaf, it is left on the part for 8 or 10 hours, when it will be found that the juicy portion of the leaf is gone, and the corn feels soft, and may be removed with ease. It should be remarked here, that *Crassula arborescens. Willd.* has the same properties.

MESEMBRYANTHEMUM. Lin.

(FICOIDEÆ.)

30. *Mesembryanthemum edule. Lin.* Suffruticose; succulent. *Stem* erect. *Branches* two-edged, prostrate, spreading. *Leaves* opposite, connate, scimitar-shaped, three-edged, fleshy, serrulate at their edge, perfectly smooth. *Flowers* solitary, terminal, large, yellow or purple. *Fruit* eatable.

Few South-African plants, are so much in domestic use as this species and *Mesembryanthemum acinaciforme Lin.*; both of which, are common in the sandy tracts of the colony. They are astringent and sourish in taste, on account of the acidulated alkaline salt, with which they seem to be impregnated. The expressed juice of the succulent leaves, taken internally, checks Dysentery, and acts as a mild diuretic; while it is also for its antiseptic property, used as an excellent gargle in malignant sore throat, violent salivation and Aphthæ, or in the form of a lotion in burns and scalds. At the Cape these plants are called : *Zure Vygen.*

31. *Mesembryanthemum crystallinum. Lin.* *Root* annual. *Stem* herbaceous, angular, procumbent, fleshy, covered all over with large pustules. *Leaves* broad,

amplexicaul, waved at the margin,ovate, entire. *Flowers* axillary, nearly sessile, small white.

The *Iceplant* contains a good deal of malic acid and lime. The expressed juice of the herb, when fresh, and rendered limpid, has been recommended as a specific in incontinence of urine, proceeding from spasm, (Enuresis spastica), and is given in doses of a tablespoonful at intervals. The Iceplant is common in the neighbbourhood of Cape Town, especially in the sandy flat near Rietvalley, where it flowers in the midst of summer.

32. *Mesembryanthemum tortuosum. Lin. Stem* short. *Branches* procumbent, elongated, divaricating, twisted. *Leaves* connate, pointed, entire, oblongo-ovate, concave, somewhat pustular, keeled, crowded. Lobes of the *Calyx* unequal.

This species, a native of the Karroo, appears to possess narcotic properties. The Hottentots, who know it by the name of *Kauw-goed*, are in the habit of chewing it, and become intoxicated, while the farmers use it in the form of decoction or tincture as a good sedative.

HYDROCOTYLE. Lin.

(UMBELLIFERÆ.)

33. *Hydrocotyle Centella. Cham.* Suffruticose. *Stems* filiform, decumbent, geniculate, flexuose. *Leaves* stalked, oblongo-lanceolate, 3 nerved, subfalcate, pubescent, acuminate, entire. *Flowers* 3-5 polygamous, umbellate, whorled, axillary. *Involucral bracts* 4-5, ovato-lanceolate, acute. *Petals* glabrous.

The roots and stalks of this plant are astringent, and a decoction of them, is used with effect by many colonists in violent Diarrhœa. They are also said to be of great service in cases of Dysentery, after the necessary evacuations have been previously procured, and where the disease has assumed a chronic form. Among the farmers, the plant is known under the name of *Persgras;* it inhabits the Cape and Stellenbosch Districts, and grows abundantly about Vlaggeberg.

BUBON Lin.

(UMBELLIFERÆ.)

34. *Bubon Galbanum. Lin.* A smooth resinous shrub. *Stem* erect, round, geniculated, branchy. *Leaves* alternate, pinnate, triternate, rigid, glaucous; *segments* rhom-

boidal, toothed or pinnatifid; terminal-ones 3 lobed. *Petioles* sheating. *Umbels* compound, many-rayed. *Involucres* many-leaved; *leaflets* linear. *Flowers* yellowish-green.

This umbelliferous plant, which attains a height of from 6 to 8 feet, and is found all over the Colony in moist places, or in the ravines of mountains, is reputed amongst the inhabitants as an excellent diuretic, under the name of *Wild Celery*. A decoction of its leaves proves salutary in cases of dropsy, and has been even administered successfully in gravel. At times some resinous matter exudes from the stem, which however in its appearance, smell, and in every respect, greatly differs from the *Gummi Galbanum*, the well known drug of our dispensaries. Linnæus, in giving the name to this species, seems to have been led astray by mistake, the real drug being derived from a different plant, a native of the north of Africa, and probably from a kind of Ferula.

ARCTOPUS. Lin.

(UMBELLIFERÆ.)

35. *Arctopus echinatus. Lin.* *Root* spindle-shaped, resinous, stemless. *Radical leaves*, pressed to the ground, stellate, hispid; their expanded lobes nearly round, incisid, 3 fid; single lobes dentate, ciliated, spiny. *Flowers* diœcious, umbellate; male umbel stalked, female sessile. *Petals* white.

This plant, the *Platdoorn* or *Ziekte-troost* of the Boers, is one of those few indigenous remedies, which, from the very establishment of the Colony, have been constantly used by its inhabitants. At that early period, the European Settlers, being often without their necessary stock of medicines, had to learn from their Hottentot neighbours, who held this plant in great esteem. It is demulcent and diuretic, and somewhat approaches the *Sarsaparilla*. The decoction of the root, is the general form under which it is prescribed in lues, lepra, or cutaneous chronic eruptions of all kinds. It also furnishes a sort of resin, which is easily procurable by making incisions into the root while it is fresh. It has been shown from chemical experiments, that the root of this plant contains an alcaloid, which combined with acids, assumes the form of neutral salts. Thus the *Arctopium sulphuricum* consists of small scaly white crystals, which are astringent in taste, and which in half grain doses produce coagulation of the saliva within the mouth.

VISCUM. Lin.

(LORANTHACEÆ.)

36. *Viscum capense. Lin. f.* A parasitical leafless shrub. *Stem* blunt, square, erect, articulated, smooth. *Branches* decussate. *Flowers* diœcious, whorled, sessile. *Fruit* a globose white berry.

A parasitical shrub (called *Vogeleend*), growing on the stems of several species of *Rhus* and *Euclea* in most parts of the Colony. In its appearance and properties it is nearly allied to the European *mistletoe.* Its stems are mucilaginous, and a little astringent. These are employed as an antispasmodic in cases of epilepsy in children and young females, where the bowels are loose and where the disease is just commencing. It has also been recommended in St. Vitus Dance, Asthma, and similar complaints, and is prescribed in the form of powder or decoction.

VALERIANA. Lin.

(VALERIANEÆ.)

37. *Valeriana capensis. Thbg. Root* tuberous. *Stem* herbaceous, erect, smooth. *Leaves* opposite, petiolate, 3-yoked, pinnatifid; lobes alternate, ovato-dentate, pointed; the uppermost largest. *Petioles* amplexicaul. *Flowers* corymbose, red. *Bracts* 2 opposite, setaceous.

This species is very closely allied to the European *Valeriana officinalis.* Although it may not be quite so powerful in its effects, yet it resembles the same not only in its appearance, but also in its medical virtues. Its roots are a favorite remedy in morbid susceptibility of the nervous system, and in the form of infusion are successfully given in typhoid fevers, epilepsy, hysteria and similar maladies. They are at the same time sudoriferous, and have a salutary effect on intestinal worms. This plant grows in moist places in many parts of the Colony; and is particularly common in the George district.

MATRICARIA. Lin.

(COMPOSITÆ.)

38. *Matricaria glabrata.* D. C. Root annual, fibrous. *Stem* herbaceous, erect, branchy, angular. *Leaves* alternate, pinnatifid; lobes linear, entire, pointed; the upper-ones toothed. *Flower-heads* terminal, solitary. Scales of the *involucre* blunt, with a broad scarious

border. *Ray* white, reflexed. *Receptacle* ovate, conical.

The *Wild Chamomile*, which in the months of November and December so plentifully covers the Cape Downs, is one of those plants, which deserve the peculiar attention of our Apothecaries. It is a *true Matricaria*, and in many respects not only equals, but even surpasses the European species. Large sums of money are yearly expended in importing this useful and popular drug, while we can gather a plant of the same order, the same genus, and the same properties at our doors. In the more remote parts of the country, where dispensaries are not so abundantly found as in the vicinity of our metropolis, the farmers and the coloured people employ the wild Chamomile as often, and with the same good effect, as we do the *Matricaria Chamomilla*, or the *Anthemis nobilis*. In short, this herb, which contains a superfluity of volatile oil, is an excellent antispasmodic, and most useful in colic and other spasmodic complaints, while on account of its aromatic bitter taste, it is recommended as a stomachic in Dyspepsia and in derangements of the digestive organs generally. Its local application as a resolvent, is sufficiently known.

GARULEUM. Cass.

(COMPOSITÆ.)

39. *Garuleum bipinnatum. Less.* Suffruticose; *Roots* long, woody. *Stem* erect, striate, branchy. *Leaves* alternate, bipinnatifid; pinnæ nearly opposite, linear-lanceolate, acute. *Flower-heads* terminal, solitary; *ray* blue, *disk*, yellow.

Amongst the medical indigenous plants of the Cape, the present deserves particular notice. It is well known to almost every resident as the *Snake-root*, having acquired its vernacular name from its effects as an antidote against the bites of venomous snakes,* with which the country abounds. The root of this plant, which is a native of the Eastern Districts, where it grows in the deserts of the Karroo, has a great similarity to the *Radix Senegæ* of the Pharmacopœa. It is bitter and acrid, and contains a good deal of a resinous substance, almost homogeneous to that which we observe in the root of the *Polygala Senega*. In the form of decoction or tincture, this root is a great favourite with the Colonial farmer, in various diseases of the chest, asthma, and such

* The most formidable of these reptiles are the *Naja Haje Merrem.* (*Cobra Capella*) and the *Vipera brachyura. Cuv.* (Poffadder.)

affections, where a free secretion of the mucous membrane of the lungs and bronchiæ is desirable. It also promotes perspiration, and acts as a diuretic in gout and dropsy. This valuable root ought to have a place in the materia medica.

COTULA. Lin.

(COMPOSITÆ.)

40. *Cotula multifida. D. C.* Herbaceous, ascending, smooth, branchy. *Leaves* semi-amplexicaul at base, pinnatifid; lobes trifid, acute. *Flower-heads* discoid, terminal, yellow. Scales of the *Involucre* blunt with a membranaceous margin.

This plant grows in the district of Uitenhage, and is used by the Hottentots, (who call it *t'Kamso*) in rheumatism, scalds, and in cutaneous affections.

ARTEMISIA. Lin.

(COMPOSITÆ.)

41. *Artemisia afra. Jacq.* Suffrutescent. *Stem* erect, branchy. *Branches* angular, furrowed, herbaceous, leafy. *Leaves* interruptedly-bipinnatifid, stalked, smooth above and tomentose beneath; lobes linear-lanceolate, falcate. *Petioles* bearing stipules at base. *Flower-heads* peduncled, racemoso-paniculate, one sided, hemisphærical, drooping. Scales of the *Involucre* ovate, lanceolate, scarious. *Recepticle* naked.

The whole of the *Wormwood* (Alsem.) has a strong, balmy smell, and a bitter, aromatic, but nauseous taste, owing to a green essential oil which it contains. The herb is tonic, antispasmodic and anthelmintic, and very useful in debility of the stomach, visceral obstructions, jaundice, hypochondriasis, or similar evils, while its efficacy as a vermifuge, is generally admitted. The best forms for using it, are the infusion, the decoction and tincture, the latter being preferred by the colonists. A strong infusion is used externally as a Collyrium in weakness of the eyes, and the pounded leaves and stalks are employed as a discutient in œdema and sugillations.

TANACETUM. Lin.

(COMPOSITÆ.)

42. *Tanacetum multiflorum. Thbg.* *Root* woody. *Stem* herbaceous, angular, erect. *Branches* fastigiate, pubescent. *Leaves* alternate, rough, pinnatifid; pinnæ

linear, inciso-dentate. *Capitula* terminal, corymbose, many-flowered, small, yellow.

This species, like all other plants of the same genus, contains a great deal of resin, and a specific, ethereal oil, of a very strong and peculiar odour. It has a bitter, aromatic, acrid taste, and is used as a tonic, antispasmodic, and anthelmintic, in flatulency, gout, amenorrhœa, and dropsy; but particularly for expelling lumbrici and other intestinal worms. It is administered in the form of powder, or infusion, which latter promotes perspiration and acts as a mild diuretic. Applied as a fomentation, it is resolvent and anodyne, and is used also for making injections. This plant, called ***Wormkruid,*** grows very abundantly in sandy soils close to the sea-shore.

ERIOCEPHALUS. LIN.

(COMPOSITÆ.)

43. *Eriocephalus umbellulatus. D. C.* Shrubby. *Branches* erect, one-sided, divaricating, smooth. *Leaves* fasciculate, linear, axillary, entire, silky. *Flower-heads* subterminal, stalked, corymbose. *Pedicels* somewhat longer than the capitula. *Ray-flowers* white.

This shrub (*wild Rosemary*) inhabits the mountainous parts of the colony, and has received its colonial name on account of its smell, which somewhat resembles that of the Rosemary. According to Thunberg it is diuretic, and used by the farmers and Hottentots in various forms of dropsy.

HELICHRYSUM. D. C.

(COMPOSITÆ.)

44. *Helichrysum nudifolium Less. Root* perannual, fibrous. *Stem* single, tomentose. *Radical leaves* stalked, amplexicaul, unequal at base, ovato-lanceolate, reticulated, 5-nerved, smooth, but scabrous at the margin and on the upper surface. *Cauline leaves* narrow, lanceolate, sharp-pointed. *Capitula* terminal, corymbose, yellow. Scales of the *Involucre* blunt.

A plant pretty common in the Colony and to be met with even in the vicinity of Cape Town, on Devil's Mountain. The whole of this plant, here called ***Caffer-tea,*** is demulcent, and, in the form of infusion, recommended in catarrh, phthisis, and other pulmonary affections.

45. *Helichrysum serpyllifolium. Less. Stem* suffrutescent. *Branches* filiform, spreading, tomentose.—

Leaves alternate, sessile, obovate, entire, blunt, somewhat curled, glabrous above and tomentose beneath. *Capitula* corymbose, conglomerated, many-flowered, white.

This species also appears to possess demulcent and emollient properties, and to be of service in the various diseases of the chest. It goes by the name of ***Hottentot's tea,*** and grows near the water courses on the Cape mountains, has a pleasant smell, and is much liked by the coloured people, who infuse it as tea. Sometimes the ***Helichrysum auriculatum Less.,*** is used for the same purpose, and under similar circumstances.

ELYTROPAPPUS. Cass.

(COMPOSITÆ.)

46. *Elytropappus Rhinocerotis. Less.* Shrubby. *Stem* erect, tomentose. *Branches* many, drooping. *Leaves* very small, imbricated, appressed, erect, sessile, filiform, smooth. *Capitula* racemose, 3-flowered.

A bush, called ***Rhinosterboschjes,*** which covers immense tracts of waste land in the Western districts. The whole of this shrub is bitter and resinous. The tops of the branches, when infused in wine or brandy, furnish a superior kind of stomachic bitters, which have a green colour, and are frequently used as a tonic in dyspepsia and other complaints, arising from impaired digestion. The tops are also given in powder to children affected with diarrhœa.

LEYSSERA. Lin.

(COMPOSITÆ.)

47. *Leyssera gnaphaloides. Lin. Root* fibrous. *Stem* suffruticose, downy. *Branches* silky, nearly umbellate. *Leaves* aggregate, imbricato-erect, sessile, linear-subulate, furrowed, more or less tomentose, glandularly scabrous. *Capitula* solitary, terminal, peduncled. *Involucre* turbinate; its scales scarious, blunt, shining. *Rays* yellow.

Very few of our indigenous plants are so much in domestic use as this one, known as ***Geele-bloemetjes-thee.*** When pounded, or rubbed between the fingers, it gives an agreeable scent, and the infusion has a pleasant sweetish taste. It is emollient, and for that reason is highly recommended in catarrh, cough, and even consumption. Some of our Apothecaries have added this plant to the ***species pectorales.***

OSMITOPSIS. Cass.

(COMPOSITÆ.)

48. *Osmitopsis asteriscoides. Cass.* *Stem* fruticose, erect, tomentose, little branched. *Branches* leafy to the apex. *Leaves* crowded, sessile, imbricated, lanceolate, pointed, entire, dotted, shaggy. *Capitula* on short pedicels, solitary, terminal, aggregate. *Involucre* unequal; scales ovate. *Rays* white, *disk* yellow.

A native of Table Mountain, were it grows abundantly. The whole plant, called *Bellis*, is impregnated with a great deal of an aromatic volatile oil, which, from its odour and taste, seems to contain camphor. Hence its virtues as an antispasmodic, tonic, and resolvent. In the form of infusion it is frequently and advantageously employed in cough, hoarseness, and in diseases of the chest generally, and is said to be also very serviceable in flatulent colic. Infused in spirit, it acts as a powerful external remedy, and Thunberg relates, that he has successfully cured paralysis, with embrocations of the *Spiritus Bellidis.* It would be worth while, to distil the essential oil, with which this plant abounds, and which, from its peculiarity, shows an affinity to Cajeput-oil.

The *Osmites hirsuta Less.*, a plant common on the mountains of Fransche-Hoek and Drakenstein, having a similar smell, is known in the Colony as *Van der Merwe's Kruiden.*

EURYOPS. Cass.

(COMPOSITÆ.)

49. *Euryops multifidus. D. C.* Shrubby. *Stem* smooth, very branchy. *Branches* alternate, divaricating. *Leaves* glabrous, linear, entire at base, bifid or multifid above. *Peduncles* alternate, axillary, much longer than the leaves, one-headed. *Ligulæ* oblong, yellow. *Achænia* villose.

From the stem and branches of this little shrub, which grows plentifully near the Olifants-River, in the District of Clanwilliam, exudes a yellowish, semi-transparent, resinous substance, which in every respect resembles the *mastic* of the Pharmacopœia, and seems to possess almost the same properties.

STOBÆA. Thunb.

(COMPOSITÆ.)

50. *Stobaea rubricaulis. D. C.* *Root* woody. *Stem*

erect, purple. *Leaves* amplexicaul, eared, rigid, smooth above, tomentose beneath, pinnatifid ; lobes lanceolate, acuminate, spiny, with prickly fringes on their margin. *Pedicels* short, bracteate, subracemose. Scales of the *Involucre* spreading, ovato-lanceolate, having two spines at base, which outreach the *disk*. *Achænia* downy.

The colonial name of *Graveel-Wortel*, given to this plant, fully implies the nature of its effects. It is a native of the district of Swellendam, where it grows on hills and uncultivated fields. A tincture prepared from the bruised roots is diuretic, and of great service in gravel.

LOBELIA. Lin.

(CAMPANULACEÆ.)

51. *Lobelia pinifolia. Lin.* *Stem* frutescent, erect, smooth. *Leaves* crowded, alternate, sessile, linear-lanceolate, acute, entire, keeled. *Peduncles* with short bracts, silky, few-flowered. Tube of the *Calyx* half-round. Flowers blue, subterminal, hairy outside.

The resinous root of this little shrub is stimulant and diaphoretic. A decoction of it is sometimes used as a domestic remedy in cutaneous affections, chronic rheumatism, and gout. This plant is common in the mountainous parts of the Western division of the Colony, where it flowers during the greater part of the year.

WAHLENBERGIA. Schrad.

(CAMPANULACEÆ.)

52. *Wahlenbergia procumbens. D. C. fil.* Herbaceous ; procumbent, diffused, entirely smooth. *Leaves* opposite, ovate, subsessile, blunt, entire or obsoletely crenate. *Pedicels* axillary, longer than the leaves. Tube of the *calyx* egg-shaped, its lobes acute. *Flowers* erect, solitary, white.

Common about water-courses, ditches, &c. in the summer. It is an emollient, and used accordingly as an ingredient in poultices. Its smell, when dried, resembles that of *Trigonella Foenum graecum*.

GOMPHOCARPUS. R. Br.

(ASCLEPIADEÆ.)

53. *Gomphocarpus crispus. R. Br.* *Stem* erect, hispid. *Branches* alternate. *Leaves* on short petioles,

subsessile, opposite, linear-lanceolate, round or subcordate at base, crisp and wavy at the margin, rigid, acuminate. *Flowers* stalked, axillary or terminal, umbellate. *Pedicels* bracteolate, hairy. *Corolla* reflexed. *Leaves* of the *corona* pointed upwards, oblong, toothed at base. *Follicles* compressed, beaked, downy. *Ribs* naked.

This plant, *the Bitter-Wortel* of the farmers, is found among hilly places in the western part of the Colony. The root, formerly known to the Dutch apothecaries as the *radix Asclepiadis crispae*, is extremely bitter and acrid, and on account of its diuretic virtues, a decoction or infusion of it has been recommended in various kinds of dropsy, and a tincture prepared of it is said to be a valuable remedy in Colic.

SOLANUM. Lin.

(SOLANACEÆ.)

54. *Solanum niveum Thbg. Root* perannual. *Stem* fruticose, 6 feet high, erect, snow-white, tomentose, thorny. *Branches* prickly. *Leaves* alternate, stalked, ovate, attenuate at both ends, entire, nerved. *Flowers* blue, in a lateral, decompound panicle. *Pedicels* dichotomous, drooping. *Fruit*, a red glabrous berry.

The leaves of this Solanum are smooth on the upper, and woolly on the lower surface. The application of the latter to foul ulcers cleanses them, and a cure is afterwards effected by applying the upper surface. Hence their Dutch name of *Geneesblâren.* The fresh juice of the berries and leaves, when formed into an ointment with lard or fat, are also in use amongst the farmers for the same purpose.

LYPERIA. Benth.

(SCROPHULARIACEÆ.)

55. *Lyperia crocea. Eckl.* A little branchy shrub. *Leaves* very small, wedge-shaped, fasciculate, obtuse, entire, smooth. *Peduncles* elongated, axillary. *Flowers* sub-racemose, yellow. Tube of the *corolla* much longer than the calyx.

This bush deserves notice as a drug, and in all probability will, ere long, become an article of colonial export. It grows abundantly in some parts of the Eastern districts, whence it has found its way into the dispensary. The flowers, which are called *Geele Bloemetjes*, closely resemble *Saffron* in smell and taste, they possess similar medical proper-

ties, and as an antispasmodic, anodyne, and stimulant, ought to rank with the *Crocus sativus*. Here, they have as yet been only used with success in the convulsions of children, but they deserve a more general trial. On account of the fine orange colour which they impart, they are in daily request among the Mahomedans, who use them for the purpose of dying their handkerchiefs. This drug has been observed to be sometimes adulterated by the admixture of other plants of the same genus, which are less efficacious.

MENTHA. Lin.

(LABIATÆ.)

56. *Mentha capensis. Thbg.* *Stem* erect, 4-edged, covered all over with a white shag. *Branches* alternate, divaricating. *Leaves* opposite, sessile, subcordate at base, linear-lanceolate, pointed, entire or often unequally toothed, hoary beneath, penninerved. *Floral leaves* awl-shaped. *Flowers* whorled, spiked. *Spikes* cylindrical, subsolitary. *Calyx* tomentose. *Corolla* white. *Stamens* longer than the corolla.

Like other *Mints*, this one contains an ethereal oil, which is sharp and bitter to the taste. It grows plentifully in moist mountainous regions, and is valued as a most excellent antispasmodic and carminative. It is used in the form of infusion in flatulent Colic, Meteorism, Cardialgia, Hysteria, and Amenorrhœa, and externally to sugillations, glandular swellings, indurations, or similar complaints.

SALVIA. Lin.

(LABIATÆ.)

57. *Salvia africana. Lin.* *Stem* shrubby, erect, 2 feet high, scabrous, very branchy. *Branches* divaricating, four-edged, shaggy. *Leaves* decussated, stalked, opposite, obovate, mucronate, serrate, wrinkled with veins, truncate at base, green above, whitish beneath. *Leaf-stalks* short, amplexicaul. *Flowers* in whorls, terminal, bracteate, peduncled. *Peduncles* opposite, short, hairy. *Bracts* 3-leaved, unequal. *Whorls* 4—6-flowered. *Calyx* campanulate villose. *Corolla* blue, hairy, double as long as the calyx. Upper lip 3-lobed, nearly entire, round; lower, 2-lobed; lobes ovate, acute.

Like those of the common Sage, the leaves of this species, (known as the *wild Sage*,) are fragrant, astringent, and bitter.

They possess nearly the same medical properties as the *Salvia officinalis*, and are used in the same way, and under similar circumstances.

LEONOTIS. R. Br.

(LABIATÆ.)

58. *Leonotis Leonurus. R. Br. Stem* shrubby, 5 feet high. *Branches* tomentose. *Leaves* oblongo-lanceolate, whorled, obtuse, serrate from the middle to the apex, narrowed at base, slightly shaggy beneath. *Flowers* in crowded axillary whorls. *Calyx* dentate, pubescent. *Bracts* linear-lanceolate, acute, shorter than the calyx. *Corolla* tube-shaped, curved, densely hairy, bright orange, or rarely buff.

This plant, the *wild Dagga*, is, on account of its beautiful flowers, a fine garden ornament. It grows wild in the sandy Cape Flats, and often at the road-side. It has a peculiar scent and a nauseous taste, and seems to produce narcotic effects if incautiously used. It is employed in the form of decoction in chronic cutaneous eruptions, and may be tried even in cases of Leprosy. The usual dose is a wineglass-ful three or four times a-day. The Hottentots are particularly fond of this plant, and smoke it instead of tobacco, and take a decoction of its leaves as a strong purgative; they likewise give it as an emmenagogue in Amenorrhœa. In the Eastern districts the *Leonotis ovata* is used for the same purpose.

CASSYTA. Lin.

(LAURINEÆ)

59. *Cassyta filiformis. Lin.* Parasitical. *Branches* filiform, leafless, twining, having papillæ instead of roots. Perianth 6 cleft. *Flowers* bisexual, clustered, greenish. *Fruit*, a red berry.

A small twining leafless parasite, known as *Vrouwenhaar*, and common all over the colony. It is employed, but not often, as a wash in scald head, and for the destruction of vermin. Some people pretend, that it makes the hair grow.

PROTEA. Lin.

(PROTEACEÆ.)

60. *Protea mellifera. Lin.* A shrub 7—8 feet high, perfectly smooth. *Stem* bushy, erect. *Branches* purplish. *Leaves* lanceolate, attenuate at base, blunt, quite

entire, glossy. *Involucre* in the axils of the branches, obovate, oblong, pink or white, scaly, imbricated. Inferior scales small, ovate, appressed; upper ones lanceolate, erect, concave, bituminous.

During the time of the inflorescence of this common, but beautiful shrub (*Suikerbosch*), the involucra or its showy flowers are filled with a sweet watery liquor, which is an allurement to the laborious bee, and to a host of various insects. This liquid contains a great deal of honey. It is therefore collected by many farmers, who prepare from it, by inspissation, a delicious Syrup, which is known as the *Syrupus Proteae* (*Boschjes-stroop*), and which is of great use in cough and pulmonary affections. The *Protea Lepidocarpon. R. Br.* and some other Proteæ also supply the same savoury juice.

RICINUS. Lin.

(EUPHORBIACEÆ.)

61. *Ricinus lividus. Jacq.* *Stem* arborescent, branchy. *Leaves* peltate, palmated, coloured; their lobes oblong, serrato-dentate.

It is scarcely necessary to say much of a remedy, so universally known as the one derived from this plant. As a mild purgative, the *Castor Oil* excels all other preparations, and is daily prescribed in all parts of the globe. It is desirable however, that, instead of importing this medicine, the colonists should prepare it themselves for exportation to those countries, where this useful plant does not grow spontaneously.

HYÆNANCHE. Lamb.

(EUPHORBIACEÆ.)

62. *Hyaenanche globosa. Lamb.* An arborescent shrub 8—10 feet high. *Branches* wrinkled, rifted, knotty. *Leaves* standing by fours on short stalks, whorled, oblong, reticulated, obtuse, leathery, quite entire, glabrous. *Peduncles* corymbose, axillary. *Flowers* monœcious.

Though the fruit of this shrub (*Wolveboon*) has not been introduced into the Materia medica of the Cape, yet it deserves particular attention. It is highly poisonous, and its four-celled nuts, when pounded, are used to destroy Hyænas, or other beasts of prey, and seem to contain *Strychnium*. This fatal bush is an inhabitant of the Maskamma mountain, in the neighbourhood of the Olifants River.

GUNNERA. Lin.

(URTICACEÆ.)

63. *Gunnera perpensa. Lin.* Herbaceous. *Radical leaves* large, stalked, kidney-shaped, unequal, veined, obsoletely lobed, cordate at base, serrato-dentate. *Petioles* elongated, compressed, streaked, hairy, as the leaves are. *Scape* tall, bearing a compound panicle of very small crowded flowers. *Fruit* a glabrous juicy berry.

This plant (*wilde Ramanas*) grows in moist and watery parts of the colony. A decoction of the root is used by the farmers in the interior as a tonic in dyspepsia, and a tincture from it, as an efficient remedy in gravel. The leaves infused as tea are said to act as a demulcent in pulmonary affections, and to cure ulcerations and wounds, when applied fresh.

PIPER. Lin.

(PIPERACEÆ.)

64. *Piper capense. Lin.* Herbaceous, smooth. *Stem* erect, articulated, branchy, climbing. *Branches* geniculate, forked, one-sided, spreading. *Leaves* alternate, stalked, cordate, acute, entire, 3-nerved above, 7-nerved beneath, netted. Nerves downy. *Flowers* in spikes, opposed. *Spikes* peduncled, cylindrical. *Fruit* a berry.

The dense forests of Swellendam and George produce a kind of pepper (*Boschpeper*), which partakes of the properties peculiar to the genus. The berries have a hot pungent taste, and an aromatic smell, and, infused in spirits, yield a tincture, which is prescribed as a stomachic, stimulant, and carminative in indigestion, flatulency and colic. In appearance and taste they greatly resemble the *Cubebs*, and very likely possess similar virtues.

CALLITRIS. Vent.

(CONIFERÆ.)

65. *Callitris Eckloni. Schrad.* A tree, with purplish, squarrose, twiggy branches. *Leaves* opposite, minute, decussated, densely imbricate, appressed, ovate, connate, bluntly pointed, glabrous.

From the branches and cones of this little tree (*Cederboom*), which grows plentifully in the mountainous regions of Clanwilliam, exudes a gum, which soon hardens in the air, becomes solid, yellowish, and transparent, and scarcely

differs from the *Gummi Sandarac*, an article well known in commerce. This gum is successfully used in the form of fumigations, in gout, rheumatism, or œdematous swellings, and is also employed for the purpose of compounding plasters or preparing varnish. *Callitris cupressoides Schrad.* (Thuia cupressoides Thbg.) a shrub, pretty common in the neighbourhood of Cape Town, exudes the same substance.

HOMERIA. Sweet.

(IRIDEÆ.)

66. *Homeria collina. Sweet. Root a corm* or tuberous bulb, covered with a fibrous, reticulated, hardened coat. *Shaft* erect, smooth, paniculately branched. *Branches* 2-3 flowered. *Spathe* 2 valved, awned. *Radical-leaf,* strap-shaped, narrow, caudate, concave, abruptly pointed, outreaching the shaft. *Cauline leaves* 2-3 much smaller. *Corolla* ephemerous, of a yellow or vermilion colour.

I introduce this plant, (which is known to almost every child in the Colony as the *Cape Tulip,)* not for its therapeutical use, but for its obnoxiousness. The poisonous qualities of its bulbs appear to have been known to some extent, years ago, but judging from the rapidity, with which death ensued in a recent case, when they had been eaten by mistake, it must be of a very poisonous kind. To Doctor Laing, Police Surgeon of Cape Town, I am indebted for the particulars of a most melancholy case of poisoning, caused by this bulb.

A malay woman, somewhat advanced in years, with her three grand-children, respectively of the ages of 12, 8, and 6, partook, on the 18th September last (1850), of a supper, consisting of coffee, fish, and rice, and ate along with this, a small basinful of the bulbs of the Homeria collina. The exact quantity, which each ate, is not well known. They appear to have supped between 7 and 8, and retired to bed at 9 o'clock, apparently in good health.

About one in the morning the old woman awoke, with severe nausea, followed by vomiting, and found the children similarly affected. She endeavoured to call for assistance, but found herself too weak to leave her bed; and when at 5 o'clock assistance arrived, the eldest girl was found *moribund,* and expired almost immediately. The little boy of 8 years died an hour afterwards, and the youngest child was found in a state of collapse; almost insensible,

with cold extremities, pulse scarcely 50 and irregular, pupils much dilated. The symptoms of the grandmother were nearly similar, but in a lesser degree, accompanied by constant efforts at vomiting. By using diffusible stimulants, she, and this child eventually recovered.

The body of the eldest child was examined 12 hours after death. Marks of intense gastritis were found, particularly about the cardiac and pyloric orifices. The inflammation extended throughout the whole course of the small intestines, and there was great venous congestion of the brain.

It is remarkable, that in cases of poisoning from *Fungi*, violent Diarrhoea is present along with vomiting, whereas in the present case obstinate constipation prevailed.

Most probably, all plants belonging to this genus partake of this poisonous property, which in the case mentioned above, was not dissipated by boiling.

HÆMANTHUS. Lin.

(AMARYLLIDEÆ.)

67. *Hæmanthus coccineus. Lin. Root* a large scaly, tunicated bulb. *Radical leaves* 2, lying flat on the ground, broad, thick, coriaceous, tongue-shaped or ovate, entire, smooth. *Scape* flat, erect, coloured, bearing a densely flowered *umbel. Involucre* 4-leaved, blood-red; its segments ovate. *Fruit* a red berry.

The bulb of this beautiful plant is used on account of its diuretic effects. It is cut into slices, digested in vinegar, and with the addition of honey, boiled down to the consistence of an oxymel, which is given as an expectorant and as a diuretic in asthma and dropsy. The fresh leaves are used externally as an antiseptic in foul flabby ulcers and in anthrax, and are known by the name of *Veldschoenblåren.*

GETHYLLIS. Lin.

(AMARYLLIDEÆ.)

68. *Gethyllis spiralis. Lin. Bulb* ovate, scaly. *Leaves* fascicled, upright, linear, channelled, glabrous, spirally twisted, appearing after the flower has decayed. *Flower* solitary, salver-shaped, white, spotted beneath with confluent purple dots; its *tube* very long, stalk-like, partly under ground. *Fruit* cylindrical, scented.

The elongated, club-shaped, orange-coloured fruit of this plant, has a peculiar fragrance, and still preserves its old Hottentot name of *Kukumakranka.* Infused in spirits, the

liquor partakes of its pleasing scent, and is employed in colic and flatulency.

ALOE. Lin.

(ASPHODELEÆ.)

69. *Aloe ferox. Lam.* *Stem* very lofty. *Leaves* perfoliate, thick, juicy, sword-shaped, deflexed, glaucous, prickly throughout, but bearing larger and sharper spines along the margins. *Flowers* racemose, crowded. *Stamens* double as long as the Corolla.

The Cape Aloes are procured from several species of this extensive genus, so peculiar to South Africa. The *Aloe ferox.* Lam. a native of Swellendam, is generally acknowledged to yield the best extract. That obtained from the *Aloe africana. Mill.* is almost equally good, but not so bitter, nor so powerful as a drastic. It is the produce of the eastern districts, whence large quantities areannually exported. The Aloe commonly used by the Colonists, is prepared from the *Aloe plicatilis. Mill.,* whose extract is a much milder purgative, and much resembles the Barbadoes Aloes. It inhabits the mountainous range near the Paarl, Drakenstein, and Fransche Hoek. It is much to be regretted, that the farmers do not take more trouble in purifying this valuable drug.

ORNITHOGALUM. Lin.

(ASPHODELEÆ)

70. *Ornithogalum altissimum. Lin.* *Bulb* very large, round, tunicated. *Leaves* (appearing after the scape has withered) strap-shaped and lanceolate, convolutely-mucronate. *Scape* solitary, glaucous, racemose, elongated. *Raceme* cylindrical, lengthened, crowded with white scentless flowers.

The fleshy bulb of this plant often grows as large as a child's head. It is diuretic, and a kind of oxymel, like that obtained from the *Hæmanthus coccineus,* is prepared from it, and employed as a demulcent in catarrh, asthma, consumption, and hydrothorax. It resembles the *Scilla maritima* in its effects, is common in Zwartland, where it is called *Magerman,* and may be prescribed as a substitute for Scilla.

TULBAGHIA. Thbg.

(ASPHODELEÆ.)

71. *Tulbaghia alliacea. Thbg.* *Root* fasciculated,

imperfectly bulbous, fibrous. *Leaves* sheating at base, two-rowed, strap-shaped, linear, obtuse, streaked, smooth. *Scape* simple, longer than the leaves, ending in a loose few-flowered umbel, surrounded by a dry 2-valved involucre. *Flowers* 6-7, on long peduncles, drooping, dark purplish. *Perianth* double, outer-one funnel-shaped, limb. 6 partite, interior 3-leaved, fleshy.

This bulbiferous plant had a very pungent, offensive odour, very like that of *garlic*, and a somewhat acrimonious taste, and has received the name of *wilde Knoflook*. Its bulbs boiled in milk are recommended in phthisis, and for expelling intestinal worms. In the eastern districts, *Tulbaghia cepacea* and *T. violacea* serve the same purpose.

ERIOSPERMUM. Jacq.

(ASPHODELEÆ.)

72. *Eriospermum latifolium. Jacq.* *Root* tuberous, roundish, knobbed, blood-red inside. *Radical-leaf* broad, ovate, pointed, entire, coriaceous, nervy, transversely veined, smooth, involute at base, dotted beneath, stalked. *Scape* simple, erect, streaked, racemose, many-flowered. *Flowers* pedicellate, bracteate, white.

The scarlet coloured tuber of this species, which grows on the sides of the Lion's Rump, near Cape Town and elsewhere, is very muculent, and used externally, in abrasions of the skin and in superficial ulcers. It is also employed by the Mohamedans in the form of decoction in amenorrhoea. Its Cape name is *Baviaans-oren*.

MOHRIA. Sw.

(FILICES.)

73. *Mohria thurifraga. Sw.* *Caudex* creeping, fibrous. *Stipe* filiform, hispid, erect. *Fronds* bipinnate, covered beneath with chaffy scales. *Pinnae* alternate, stalked; *pinnules* ovate, the upper fruit-bearing-ones, crenate; the barren-ones deeply incised.

This fern grows abundantly on the Cape Mountains. The plant, when bruised, is fragrant and smells of *Olibanum*. In some parts of the colony, the dry leaves are pulverised, and with fat made into an ointment, which is cooling, and very serviceable in burns and scalds. The vernacular name of this plant is *Brand-boschjes*.

ASPIDIUM. Sw.

(FILICES.)

74. *Aspidium athamanticum. Kunze.* *Stipe* erect, flexuose, covered at base with long linear deciduous scales. *Fronds* leathery, smooth, lanceolate, three-pinnate. *Pinnae* stalked, oblong, acuminate. *Primary pinnules* sessile, ovato-oblong, wedge-shaped at base, decurrent; *secundary*, sickle-shaped, oblong, blunt, veiny. *Sori* round, solitary. *Involucre* kidney-shaped.

A fern, growing on grassy hills and in moist places, near Port Natal. The Zoolu Caffres, who know it by the name of *Uncomocomo*, use it as a vermifuge, and its *caudex*, given in the form of powder, infusion or electuary, has been proved to be excellent in Helminthiasis, and especially in the cure of the tape-worm.

ADIANTHUM. Lin.

(FILICES.)

75. *Adianthum æthiopicum. Lin.* *Caudex* fibrous. *Stipe* compressed, waving, purplish. *Fronds* very delicate, transparent, decompound, smooth. *Pinnæ* alternate on capillary stalks. *Pinnules* rhomboidal, crenate at apex, traversed by forked nerves.

An infusion of this herb is sometimes used as an emollient in Coughs, and in diseases of the Chest. A syrup is also prepared from it, and it forms part of the *species pectorales* of the Pharmacopoeia.

FUCOIDEÆ.

76. The peculiar substance called *Iodine*, and now so universally appreciated as a powerful remedy, is derived from the ashes or kelp of the *Fucoideæ* or sea-weeds. With these our shores are well strewed; and amongst them are found *Algae*, distinguished both for extraordinary frequency and gigantic size. It is certain, that the *Ecklonia buccinalis Hornm.* (Zee-bamboes), our *Sargassa*, *Laminariae* and *Iridaeæ*, the *Macrocystis pyrifera Ag.*, the *Desmarestia herbacea Lamour.*, and many more of our large marine plants, would easily yield a vast quantity of *Iodine*, if the experiment of preparing it, were thought worth a due trial, for even some of our smaller Algae, such as the *Botryocarpa prolifera. Grev.*, when dipped in fresh

water for a couple of hours, impart a deep orange hue to the liquid, and seem to saturate it with that important and valuable matter.

SCLERODERMA. Pers.

(FUNGI.)

77. *Scleroderma carcinomale. Pers.* Club-shaped; *peridium* dehiscent at base. *Stipe* erect, cylindrical, white. *Cap* ovate, tapering upwards, nearly as long as the stipe.

A mushroom of an oblong, club-shaped form, which grows gregariously on ant-hills. It contains a blackish powder (seeds), which is used occasionally for curing carcinomatous ulcers.

APPENDIX.

I subjoin to the above enumeration of medical plants, a remedy, derived from the *animal Kingdom*, one, which if tried properly, will in all probability become an article of commerce. I allude to the

Hyraceum (mihi.)

much valued by many farmers, and well known amongst them, by the rather harsh and unpoetical name of *Dasjespis*. Thunberg and other travellers mistook it for a kind of bitumen; but it is in fact the secretion of a quadruped, which is common throughout the Colony, and that lives gregariously on the rocky summits of mountains, viz. the *Klipdas* or *Hyrax capensis*. It is worthy of note, that this production has baffled the researches of eminent Zoologists, who have failed from even minute dissection, in discovering any specific secretory organ, from which this matter could be derived. It may be asserted however, that the *Hyraceum* is produced by the uropoetical system of the animal just named, and in order to explain this seeming anomaly, it must be observed, that the Hyrax drinks very seldom, if ever. Its urine, like that of the *Hare*, is not thin and limpid as in other quadrupeds, but thick and of a glutinous nature. From a peculiar instinct, these animals are in the habit of secreting the urine always

at *one* spot, where its watery parts evaporate in the sun, while its more tenacious portions stick to the rock and harden in the air. The fresh urine of the Hyrax is of a reddish tint, and this has given rise to the opinion of those, who took this production for a kind of menstrual secretion.

This substance is common on our mountains, and is to be found mixed with earth and dirt, near the caves or crevices, where these animals have their haunts.

In smell, and in its therapeutical effects, the *Hyraceum* resembles most the *Castoreum*, a remedy which is decreasing in quantity every year, and may therefore be replaced by the former. A new article of export would thus be gained. Amongst the farmers, a solution of this substance is highly spoken of as an antispasmodic in Hysterics, Epilepsy, Convulsions of Children, St. Vitus's dance, in short, in spasmodic affections of every kind.

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